

1 CLAIM AMENDMENTS

2 Claim 1 - (currently amended)  
3 Claim 2 - (currently amended)  
4 Claim 3 - (original)  
5 Claim 4 - (original)  
6 Claim 5 - (original)  
7 Claim 6 - (new)

8 1. (currently amended) A method of forming a box having a plurality of corner gussets  
9 comprising the steps:

10 providing a generally planar box blank having a base wall, four side walls and four gusset corner  
11 formation wall sections each having upper and lower portions, said four gusset corner  
12 formation wall sections extending from and connected to ~~at least~~ two of said side walls  
13 opposite one another with two of said four gusset corner wall sections connected to and  
14 extending from each of said two of said side walls;

15 providing a box forming device including a longitudinally extended box blank track means operative  
16 to continually feed said box blank through said box forming device generally free of  
17 stoppage of said box blank while in said gusset formation section and further including a  
18 gusset formation section having at least one kicker plate, at least one forming blade and at  
19 least one adhesive securement means;

20 feeding said box blank into said box forming device on said box blank track means;

21  
22 deflecting each of said gusset corner formation wall sections to a generally perpendicular orientation  
23 relative to said base wall via said at least one kicker plate;

24  
25 bending said upper portion of each of said gusset corner formation wall sections towards a connected  
26 one of said side walls via said at least one forming blade such that said upper and lower  
27 portions of said gusset corner formation wall section form an acute angle therebetween;  
28

1 securing a glue flap section of said upper portion of each of said gusset corner formation wall  
2 sections to said connected one of said side walls via said at least one adhesive securement  
3 means thereby securing said upper and lower portions of said gusset corner formation wall  
4 section to form a gusset;

5  
6 folding said side walls upwards generally perpendicular to said base wall;

7  
8 securing adjacent ones of said side walls to one another whereby said box is formed.

9  
10 2. (currently amended) In combination:

11  
12 a generally planar box blank having a base wall, four side walls and four gusset corner formation  
13 wall sections each having upper and lower portions, said four gusset corner formation wall  
14 sections extending from and connected to at least two of said side walls opposite one another  
15 with two of said four gusset corner wall sections connected to and extending from each of  
16 said two of said side walls; and

17  
18 a box forming device having a longitudinally extended box blank track means operative to  
19 continually feed said box blank through said box forming device generally free of stoppage  
20 of said box blank while in said gusset formation section and further including a gusset  
21 formation section having at least one kicker plate, at least one forming blade, at least one slot  
22 generally adjacent said at least one forming blade for receiving said lower portion of said  
23 gusset corner formation wall section and at least one adhesive securement means;

24  
25 said box forming device operative to engage said box blank with said at least one kicker plate  
26 engaging one of said gusset corner formation wall sections and bending said one of said  
27 gusset corner formation wall sections generally perpendicular with said base wall;

1 said at least one slot operative to receive said lower portion of said one of said gusset corner  
2 formation wall section and restrict bending thereof;

3  
4 said at least one forming blade operative to engage said upper portion of said one of said gusset  
5 corner formation wall section and bend said upper portion relative to said lower portion such  
6 that said upper and lower portions of said gusset corner formation wall section form an acute  
7 angle therebetween;

8  
9 said at least one adhesive securement means operative to secure a glue flap section of said upper  
10 portion of said one of said gusset corner formation wall sections to a connected one of said  
11 side walls thereby securing said upper and lower portions of said gusset corner formation  
12 wall section to form a gusset; and

13  
14 said at least one kicker plate, at least one forming blade, at least one slot cooperating to form gussets  
15 with each of said gusset corner formation wall sections.

16  
17 3. (original) The combination of claim 2 wherein said at least one forming blade  
18 comprises a forwardly extending curved engagement section curved to engage an outer face of said  
19 gusset corner formation wall sections, a center curved deforming section operative to bend said  
20 upper portion of said gusset corner formation wall section and a rear section operative to press the  
21 formed gusset onto one of said side walls to which said gusset corner formation wall section is  
22 connected.

23  
24 4. (original) The combination of claim 2 wherein said at least one adhesive  
25 securement means comprises a pair of glue compression rollers operative to engage a respective glue  
26 flap section of said upper section of said gusset corner formation wall section to secure said glue flap  
27 section to the connected side wall to complete formation of the corner gusset.

1           5.       (original)       The combination of claim 2 further comprising at least one kicker  
2 wheel mounted adjacent said at least one kicker plate, said kicker wheel operative to alternatively  
3 engage and disengage said at least one kicker plate to move said at least one kicker plate between  
4 a bending position and a disengaged position, thereby only bending said gusset corner formation wall  
5 sections of said box blank into a generally perpendicular orientation relative to said base wall and  
6 permitting other sections of said box blank to pass free of engagement.

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8           6.       (new)   A method of forming a box having a plurality of corner gussets comprising  
9 the steps:

10  
11 providing a generally planar box blank having a base wall, four side walls and four gusset corner  
12 formation wall sections each having upper and lower portions, said four gusset corner  
13 formation wall sections extending from and connected to two of said side walls opposite one  
14 another with two of said four gusset corner wall sections connected to and extending from  
15 each of said two of said side walls;

16  
17 providing a box forming device including a gusset formation section having a longitudinally  
18 extended box blank track means operative to continually feed said box blank through said  
19 box forming device free of stoppage of said box blank while in said gusset formation section;

20  
21 said gusset formation section further comprising at least two kicker plates, at least two forming  
22 blades and at least two adhesive securement means wherein at least one of said at least two  
23 kicker plates, said at least two forming blades and said at least two adhesive securement  
24 means are positioned on opposite sides of said box blank track means for engaging and  
25 manipulating opposite sides of said box blank;

26  
27 feeding said box blank into said box forming device on said box blank track means;

1 deflecting each of said gusset corner formation wall sections on opposite sides of said box blank to  
2 a generally perpendicular orientation relative to said base wall via said at least two kicker  
3 plates;

4  
5 bending said upper portion of each of said gusset corner formation wall sections on opposite sides  
6 of said box blank towards a connected one of said side walls via said at least two forming  
7 blades such that said upper and lower portions of said gusset corner formation wall sections  
8 form an acute angle therebetween;

9  
10 securing a glue flap section of said upper portion of each of said gusset corner formation wall  
11 sections on opposite sides of said box blank to said connected one of said side walls via said  
12 at least two adhesive securement means thereby securing said upper and lower portions of  
13 said gusset corner formation wall section to form a gusset;

14  
15 folding said side walls upwards generally perpendicular to said base wall;

16  
17 securing adjacent ones of said side walls to one another whereby said box is formed.  
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